

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2004/009706

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G11B7/0045

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/114234 A1 (CHAO CHI-MOU ET AL) 22 August 2002 (2002-08-22)	1, 2, 4-10, 20-25, 34-39
Y	paragraphs '0011! - '0015!	3
A	paragraphs '0025! - '0037!; figures 1-7	11-19, 26-29
Y	US 2002/001275 A1 (KAMIMURA TAKUYA ET AL) 3 January 2002 (2002-01-03) paragraphs '0014! - '0019!	3
X	EP 0 556 046 A (SONY CORP) 18 August 1993 (1993-08-18) column 1, line 15 - column 3, line 9 ----- -/--	1, 34

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*G\* document member of the same patent family

Date of the actual completion of the international search

22 December 2004

Date of mailing of the international search report

30/12/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Stemmer, M

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 642 128 A (PIONEER ELECTRONIC CORP ; PIONEER VIDEO CORP (JP)) 8 March 1995 (1995-03-08) column 3, line 52 - column 4, line 42 -----	1, 34
X	US 2002/150012 A1 (HSIAO KUEN-YUAN ET AL) 17 October 2002 (2002-10-17) paragraphs '0007!, '0008!, '0015! - '0017! -----	1, 34
X	EP 0 557 584 A (PIONEER ELECTRONIC CORP) 1 September 1993 (1993-09-01) column 2, line 34 - column 3, line 13 column 4, line 55 - column 6, line 23 -----	1, 34
X	US 2003/048713 A1 (SUZUKI HARUYUKI) 13 March 2003 (2003-03-13) paragraphs '0015! - '0029! -----	1, 34
X	US 2003/043711 A1 (MASHIMO AKIRA ET AL) 6 March 2003 (2003-03-06) paragraphs '0011!, '0031! - '0043! -----	1, 34
X	US 2002/024903 A1 (SATO SHINICHI) 28 February 2002 (2002-02-28) cited in the application the whole document & PATENT ABSTRACTS OF JAPAN vol. 2002, no. 04, 4 August 2002 (2002-08-04) & JP 2001 344754 A (RICOH CO LTD), 14 December 2001 (2001-12-14) abstract -----	1, 34

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International application No.  
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### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 30-32  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 30-32

The subject-matter of claims 30-33 relating to a recording medium lacks clarity (Art 6 PCT) since the recording medium is defined by the recording method applied to it.

It is however considered that a recording medium wherein marks and spaces have been formed according to the stipulated features can not be distinguished from a recording medium wherein marks and spaces have been formed according to a state of the art method.

The scope of protection sought by said claims 30-33 is therefore not clear and no meaningful search is possible.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/009706

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
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			EP	0556046 A1	18-08-1993
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			DE	69416472 D1	25-03-1999
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